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08/31/21  
02:57 PM

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE  
STATE OF CALIFORNIA**

Order Instituting Rulemaking Concerning  
Energy Efficiency Rolling Portfolios,  
Policies, Programs, Evaluation, and Related  
Issues.

Rulemaking 13-11-005

**SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) OPENING COMMENTS  
ON RULING REQUESTING COMMENTS/PROPOSALS TO ADDRESS GOVERNOR'S  
PROCLAMATION OF JULY 30, 2021**

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Dated: **August 31, 2021**

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Pursuant to the Administrative Law Judge's Ruling on August 6, 2020 (Ruling), Southern California Edison Company (SCE) appreciates the opportunity to submit the following comments and responses to the topics set forth in the Ruling.

**I.**

**INTRODUCTION**

SCE appreciates the opportunity provided by the Ruling to make proposals for specific California Public Utilities Commission (Commission or CPUC) actions that result in projects which will deliver Energy Efficiency (EE) benefits by the summers of 2022 and 2023. In these comments, SCE makes recommendations in three categories designed to both accelerate savings that would otherwise occur after the summer of 2023 and capture potential that would be otherwise stranded. First, SCE recommends the Commission make modifications to EE portfolio policy including, 1) allowing portfolio administrators (PAs) to use a single stage solicitation process for upcoming third party solicitations, 2) allowing non-lead PAs to fill gaps left by statewide programs, and 3) allowing PAs to utilize the Annual Budget Advice Letter (ABAL) due to be filed by November 1, 2021 to request additional funding for EE programs that are

accelerated or expanded as a result of rule or policy changes made in response to comments on this Ruling. Second, SCE proposes recommendations for workpaper and program-specific modifications including 1) expediting the review of SCE's Indoor Horticulture Lighting workpaper, 2) enabling a Residential Heat Pump HVAC Fuel Substitution emergency program, and 3) allowing the Strategic Energy Management (SEM) program to expand to additional sectors.

## II.

### **DISCUSSION**

#### **A. Modifications To Portfolio Level Policy**

##### **1. PAs should be allowed to use a single stage solicitation process through 2023 to enable the prioritization of timely energy savings.**

The current two-stage solicitation process was established in Decision (D.)18-01-004. Pursuant to that decision, the Commission requires the investor-owned utility (IOU) PAs to conduct both a request for abstract (RFA) process and request for proposals (RFP) process, during which responses are evaluated to determine which bidders proceed to the contract negotiation phase.<sup>1</sup> D.18-01-004 states that, “[t]he two-stage process should be used unless there is some specific schedule-related reason that a shortcut must be used.”<sup>2</sup> The RFA phase of the solicitation is designed to collect high-level information about prospective programs and a summary of a bidder's qualifications, which the PAs use as a screen before bidders engage in the more rigorous RFP process. For some solicitations, including those in specific niche market areas, it is probable that bypassing the RFA process and proceeding directly to the RFP stage would produce the same results as the two-stage process. For these solicitations, the primary effects of conducting the RFA process are that it adds several months to the solicitation process

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<sup>1</sup> D.18-01-004, Section 3.2.

<sup>2</sup> *Id.* at p. 31.

and burdens the participating bidders because they must participate in both the RFA and RFP processes. SCE, therefore, recommends the Commission allow PAs the discretion to eliminate the RFA phase and utilize a single stage RFP process, prior to moving to competitive contract negotiations as described in D.18-01-004, for any third-party EE solicitations, at a minimum, conducted in 2022 and 2023. SCE estimates that this change will reduce the time it takes to solicit for new programs by six months which will increase the likelihood of implementing new programs prior to the summer of 2023.

SCE will utilize the single stage solicitation process to enable system peak reductions while encouraging third-party innovation. The solicitation will aim to deliver savings prior to summer of 2022 and beyond summer of 2023<sup>3</sup> by asking bidders to describe their delivery approach to ensure proper and timely installation of energy efficiency measures and how they are prioritizing peak demand savings by focusing on appropriate end uses. Recognizing that timeliness and specific technologies will be required to meet system needs,<sup>4</sup> SCE plans to encourage cost-efficiency and moderate cost-effectiveness requirements. A single stage RFP and targeted solicitations will further enable the third-party market to provide timely and incremental solutions to provide system peak reductions.

## **2. Non-lead PAs should be allowed to fill gaps left by statewide programs.**

The structure for statewide programs was established in D.16-08-019 and additional guidance was provided in D.18-05-041. This structure requires that, “[u]pstream (at the manufacturer level) and midstream (at the distributor or retailer level, but not the contractor or installer level) interventions are required to be delivered statewide.”<sup>5</sup> While this model is simple and will likely be efficient in capturing the majority of potential for upstream and midstream

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<sup>3</sup> SCE anticipates a contract would need to be at least two-years to provide sufficient time for a third-party to ramp-up their operations and provide certainty for the market.

<sup>4</sup> For example, SCE would consider an approach like the direct installation of Commercial/Industrial HVAC program.

<sup>5</sup> D-16-08-019, Ordering Paragraph (OP) 5.

programs, it is also likely that some potential will be stranded by these broad statewide programs. Because each statewide program is overseen by a single lead PA who designs the program or contracts with a third-party implementer to design the program,<sup>6</sup> the opportunity to capture this stranded potential is limited. For example, an implementer for a statewide program may choose to offer only certain measures that are the most cost effective for the implementer pursuant to their contract with the statewide lead PA, while not offering other measures that could capture savings, but are not be attractive to the implementer. This scenario could create a measure gap where customers with a preference for other measures that employ different technologies are left unserved and their potential for savings left stranded. Similarly, statewide programs have the unique challenge of serving the entire state. It is possible that implementers will target the geographic areas determined to be more cost effective, while focusing less on areas that are not as cost effective for the implementer. For example, an implementer for statewide HVAC may focus on hot climate zones in advantaged communities while spending far less time engaging with more temperate areas and/or disadvantaged communities, which could leave savings for these customers potentially unrealized.

There is currently no clear policy regarding whether a local program can fill a gap left by a statewide program. The closest guidance only addresses local pilots stating, “[t]hus, as long as such local pilots do not directly compete with, or otherwise impede the progress of, any operational statewide programs, local pilots are permitted.”<sup>7</sup> SCE therefore recommends the Commission provide specific guidance to allow local programs to fill gaps left by statewide programs and that flexibility be provided to PAs to fill these gaps using a variety of options including offering local upstream programs. The Commission should require proposals for any such local programs to follow the same requirements as other EE programs with the additional requirement of demonstrating how the local program or other activity will fill an identified gap.

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<sup>6</sup> *Id.*

<sup>7</sup> D.18-05-041, at p. 82.

**3. The Commission should allow PAs to request additional funding in Program Years (PY) 2022-2023 ABAL to expand cost effective resource programs.**

EE PA program budgets for program years 2018 through 2025 were approved in D.18-05-041,<sup>8</sup> which also ordered that the expected annual funding levels for 2018-2025 be modified in each PA's ABAL for PY 2019.<sup>9</sup> The current process for review of annual budgets is through the ABAL process established in D.15-10-028.<sup>10</sup> This process requires PAs to provide forecasts for program budgets, and savings as well as a cost effectiveness statement. While PAs are not allowed to exceed the overall amount of funding approved in the business plan, staff has discretion to approve a PA's request that exceeds the corresponding annual funding amount through the ABAL review process.<sup>11</sup> In addition, D.21-01-004 reaffirms this in the context of approving additional funding for the School Energy Efficiency Stimulus Program required by Assembly Bill (AB) 841.<sup>12</sup>

The budgets for IOU PAs for program years 2022 and 2023 will be set by a two-year ABAL filing<sup>13</sup> due no later than November 1, 2021. Once these budgets are approved, it is the PA's responsibility to not exceed the approved budget. If PAs need additional funding for a specific program, they must actively manage the portfolio by shifting funds from other programs or activities. Any unspent or uncommitted funds are returned to customers or used to offset future collections. This approach limits PAs from overspending their budgets and limits rate impacts to what is approved in each ABAL. This approach also limits the ability of PAs to expand and provide additional funding for programs that are running well, effectively limiting the benefits provided to customers and the grid.

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<sup>8</sup> *Id.*, at OP 12.

<sup>9</sup> *Id.*, at OP 43.

<sup>10</sup> D.15-10-028, at Section 3.2.2.3.

<sup>11</sup> D.18-05-041, at Section 7.3, OP 50.

<sup>12</sup> D.21-01-004, at Section 4.1.

<sup>13</sup> D.21-05-031, at OP 13.

With this background, SCE recommends the Commission provide more flexibility to PAs in the PY 2022 and 2023 ABAL by allowing IOUs to request approval for additional funding, specifically to expand resource programs to provide for additional cost-effective energy savings for customers focused on savings during time of net peak demand. This contingency funding account should be tracked separately from other program funds, be used only to expand resource programs, and it should be fungible between 2022 and 2023 program years. Any unspent/uncommitted funding remaining at the end of 2022 would be transferred forward to the 2023 program year, and any unspent/uncommitted funding remaining at the end of 2023 would be handled in the same manner as other unspent/uncommitted funds and returned to customers or used to offset future EE funding requests.

**B. Workpaper and Program-Specific Modifications**

**1. The Indoor Horticulture Lighting workpaper (SWLG019-01) should receive expedited review and approval.**

The indoor agriculture, or controlled environment agriculture (CEA), sector has grown rapidly in recent years in SCE's service area largely resulting from state-licensed commercial cannabis cultivation operations and other traditional field-grown crops as a result of irrigation water restrictions and conversion of agriculture land as well as conversion of commercial building stock. Current loads from CEA in the SCE service area are 40-50 megawatts (MWs). An additional 85-100 MWs of new CEA load is anticipated on the SCE system within the next 12 to 24 months based on current service requests and analysis of California Department of Cannabis Control license data. The rapid growth of CEA operations is currently creating or soon will create localized grid constraints in certain communities, such as California City. More energy intensive high intensity discharge (HID) lighting is still the most prevalent grow light fixture type utilized by large CEA operations due to lower fixture costs and longer, more trusted history in the CEA market sector compared to high efficacy light emitting diode (LED) fixtures.

HID grow light fixtures for commercial operations remain three to five times more expensive than comparable LED fixtures. CEA operations fully utilizing LED grow lighting, and associated reduced interactive cooling and dehumidification needs, typically are 30-40 percent less energy intensive than operations that use traditional, standard efficiency HID systems.

Although SCE currently offers an Indoor Horticulture Lighting Measure (IHLM) via its Calculated program, a deemed IHLM offering is expected to have significantly more adoption in the CEA market segment due to more streamlined application and approval process for both end-use CEA customers and the LED grow light supply chain. To address this market need, SCE submitted the Indoor Horticulture Lighting workpaper on July 19, 2021 for CPUC Ex Ante review and recently received a disposition, on August 13, 2021. The disposition requested SCE place the workpaper on-hold until the CPUC completes an Industry Standard Practice study by November 2021. However, current market conditions warrant an immediate offering to reduce energy use for this high energy use customer segment, and therefore there is an urgent need for the CPUC to approve the workpaper. To meet this need on an expedited basis, SCE requests waiving the Indoor Horticulture Lighting workpaper (SWLG019-01) Ex Ante review. It is SCE's understanding that the cost of LED fixtures has hindered customers from adopting this technology even for new accounts, so SCE believes that offering such an energy efficient measure through a deemed approach will increase customer participation and ultimately help better manage net peak demand load on California's electric grid.<sup>14</sup> Adoption of the workpaper in the very near term would allow the existing marketplace of energy efficiency third party contractors to rapidly deliver the deemed IHLM measure to address specific grid constrained areas and also more broadly as the industry continues to expand. Should contractors with existing contracts with California utilities choose not to offer these measures, this workpaper would also expedite the design and delivery of new program(s) to serve this market.

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<sup>14</sup> See Cannabis Energy & Environmental Policy Primer for Federal, State and Local Policy Makers and Regulators, available at <https://catalog.resourceinnovation.org/item/cannabis-energy-environment-policy-primer-421620>.



**2. Policy modifications should be approved to enable a Residential Heat Pump HVAC fuel substitution emergency program (midstream or midstream with direct install for accelerated peak reduction).**

Accelerating the adoption of Residential Heat Pump Heating, Ventilation, and Air Conditioning (Res HP HVAC) fuel substitution measures directly supports both objectives of “mitigat[ing] the risk of capacity shortages” and “increas[ing] the availability of carbon-free energy at all times of the day.”<sup>15</sup> Therefore, SCE recommends the Commission approve policy modifications to enable a direct install Res HP HVAC program that can be launched quickly before summer 2022. The key policy modifications required to enable this proposed Res HP HVAC program would be the Commission 1) either require statewide midstream programs to offer Res HP HVAC incentives before summer 2022, or, alternatively, allow SCE to relaunch its local midstream Res HP HVAC incentive program; and 2) suspend standard EE cost-effectiveness rules that do not currently account for these emergency conditions, or, alternatively, include a Res HP HVAC program in an EE funding category that is not constrained by cost-effectiveness but can still achieve the scale needed to meet the state’s emergency situation.

Residential HP HVAC reduces peak electricity load usage if it is replacing an existing central Air Conditioner (A/C). Because 70 percent of California households have A/C – and 79 percent of SCE households have A/C<sup>16</sup> – an effective Residential HP HVAC program would result in energy savings. Because the fuel substitution rules do not require quantifying peak load impacts at this time,<sup>17</sup> the Res HP HVAC fuel substitution workpaper does not calculate the peak load impact. However, because peak load impact for Res HP HVAC is simply the A/C portion of the HP technology during the summer peak and is based on different efficiency levels (called

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<sup>15</sup> State of California Proclamation of a State of Emergency signed July 30, 2021, available at <https://www.gov.ca.gov/wp-content/uploads/2021/07/Energy-Emergency-Proc-7-30-21.pdf>

<sup>16</sup> See DNV Residential Application Saturation Study Database, available at [https://webtools.dnv.com/CA\\_RASS/](https://webtools.dnv.com/CA_RASS/)

<sup>17</sup> Fuel Substitution Technical Guidance v1.1 Section 2.1.

SEER, or Seasonal Energy Efficiency Ratio), the Res HVAC workpaper calculates the peak load reduction from the higher SEER Res HP HVAC technology. The peak load reduction for ductless Res HP HVAC accelerated replacement of an existing single family, Climate Zone 10, A/C with a SEER 15 unit compared to the existing baseline of a SEER 13 is 0.09 kW/ton.<sup>18</sup> The workpaper shows the average home uses three tons of cooling, so this measure saves 0.27 kW/home, or 0.27 kW/Res HP HVAC accelerated replacement. Note that this is the lowest efficiency level above-code (SEER 14), so peak reductions will increase should higher SEER levels measures be installed.

Fuel substitution towards electrification increases the availability of carbon-free energy throughout the day as it also electrifies the heating of a home, which can then use the increasingly clean electric grid or a customer's solar and/or storage capabilities. Because the HVAC unit is more efficient, this substitution also lowers demand during peak summer hours. The same Res HP HVAC measure above saves 14.7 lifecycle GHG tons per Res HP HVAC installation.<sup>19</sup>

SCE's midstream Res HP program offered in 2020 and early 2021 realized 22,290 Res HP HVAC installations (and based on the above data, an estimated peak reduction of 5.9 MW). Under the latest cost-effectiveness rules, if SCE continued to offer this local program, it would have a Total Resource Cost (TRC) greater than 1.25. SCE closed this local program to make way for the statewide Res HVAC program per the Commission's policies, but the statewide Res HVAC program does not accomplish what SCE is seeking to accomplish with the proposed local program. Specifically, the statewide Res HVAC program's implementation plan says it will offer small incentives only for split HP HVAC systems on the order of \$25/ton to \$100/ton based on electric-to-electric energy savings, which only covers 17-27% of the incremental cost of a range of HP HVAC efficiency levels (\$92-581/ton), and 2-6% of the full cost of the HP HVAC

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<sup>18</sup> See EE workpaper: SWHC050-02 Ductless HVAC Heat Pump Res.

<sup>19</sup> See EE workpaper: SWHC044-02 Ductless HVAC Res – FS.

equipment (\$1,202-1,691/ton).<sup>20</sup> If a midstream HP HVAC incentive program was launched for this emergency condition that utilized fuel substitution, as well as a broader range of Res HP HVAC units beyond split systems, it could justify higher, more effective incentives and would result in more peak reduction in SCE's service territory.

In addition to the proposed midstream Residential HP HVAC Fuel Substitution program, the CPUC could add a direct install, accelerated replacement element for increased peak reduction and enlarge the potential replacement market. Accelerated replacement results in retiring below-code, inefficient A/C units for larger peak reduction savings compared to the code-compliant technologies of a midstream, normal replacement program. Because this is an emergency situation, adding a direct install, accelerated replacement component for Res HP HVAC installations would be expected to drive adoption faster and at greater scale than a midstream program that sets incentives based on normal replacement (i.e., near or after the end of the useful life of the HVAC system). Waiting for units to reach the end of their useful life significantly lowers the potential market for Res HP HVAC installations per year when compared to allowing any potential customer to retire their existing A/C unit for a new and more efficient Res HP HVAC unit.<sup>21</sup>

The cost-effectiveness of this proposed additional direct install program element is currently a barrier to offering this program at scale to realize significant peak and GHG reduction. SCE performed an internal cost-effectiveness analysis for a residential HP HVAC direct install, accelerated retirement program with the latest avoided costs and calculated a low TRC (Total Resource Cost) of 0.4. Current cost-effectiveness methods calculate benefits using the CPUC's Avoided Cost Calculator (ACC), but the ACC does not quantify the additional dollar benefits of these emergency conditions. To enable this program, SCE recommends suspending cost-effectiveness requirements for a residential HP HVAC direct install program

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<sup>20</sup> See EE workpaper: SWHC045-01 Heat Pump HVAC\_Residential\_Fuel Substitution.

<sup>21</sup> Additional requirements could be added that ensure that the existing A/C unit is a lower efficiency than what is being incentivized through this proposed program.

because the avoided costs do not apply to this emergency situation, but the technology's peak and GHG reductions directly aligns with the Governor's Proclamation's objectives. An alternative policy solution would be to categorize this program in an EE funding category that is not restricted by TRC, such as market support or equity (but those are indirectly limited by TRC because the total funding of those categories are constrained by the size of the cost-effective resource acquisition EE category, so additional policy modifications will likely be needed to hit the scale of peak reduction needed for these emergency conditions).

**3. Allow Strategic Energy Management (SEM) to expand to additional sectors including Commercial, Public and Agricultural.**

SEM, a resource program that takes a holistic approach to energy savings (behavioral, retrocommissioning, operational, BRO, and capital) for customer facilities to significantly reduce energy consumption, has achieved continued success in California among the four IOUs. The SEM program's success is demonstrated by its high program participation, incremental savings, high cost-effectiveness and high customer satisfaction levels.<sup>22</sup> This success is due in part to the program's focus on continuous energy improvement which aligns Industrial customers' focus on operational efficiency, sustainability, and profitability with the program's focus on reducing energy use for high energy intensive Industrial customers. However, the program's success has been largely limited to the Industrial sector as few SEM programs exist outside of this sector.<sup>23</sup>

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<sup>22</sup> At the July 30, 2021 CPUC SEM public workshop on the SEM program and M&V design guides for Cycle 2, the statewide SEM program reported that it has enrolled 96 customers since its launch in 2018, achieved 54,336,233 net kWh, 3,703 net kW, and 2,712,580 net therms since launch and was rated 4.6 out of 5.0 on an average customer satisfaction rate across all IOUs. In 2020, SCE's SEM program reported a 1.23 Total Resource Cost (TRC) in SCE's 2020 EE Annual Report.

<sup>23</sup> In D.16-08-019, the Commission recognized its past direction for the utilities to continue support for the "continuous energy improvement" program via Strategic Energy Management (SEM) per guidance from the 2008 Strategic Plan Industrial Chapter. D.16-08-019 did not, however, specify whether the IOU SEM programs could extend beyond the Industrial sector. Marin Clean Energy does offer an SEM program in the Agricultural sector.

To address the current energy crisis, SEM principles could be adapted to other market sectors including Commercial, Public and Agricultural by employing SEM's program offerings of energy coaching, energy modeling, and treasure hunts to identify low to no cost BRO savings using existing third-party SEM implementers. The advantage of this approach is the speed to market because Purchase Orders with existing SEM implementers could be modified to allow participation in new markets rather than conducting new market solicitations. The duration of these expanded opportunities could be tailored to the expected duration of the energy crisis as SEM is a closed (recruited) program model, meaning that customers are recruited into cohorts (groups) of four to ten participants based on energy usage, program fit, and participant commitment to SEM guidelines. In this manner, overlap with other third-party programs can be minimized to a small number of participants with targeted industry and geographic selection that can achieve high energy savings for the selected participants.

SCE is seeking Commission clarification that SEM programs may be extended to, and the current EM&V guides utilized for, new market sectors including Commercial, Public and Agricultural for a minimum of one two-year cycle, with the option to extend if necessary, using existing SEM implementers.

### **III.**

### **CONCLUSION**

SCE appreciates the Commission's consideration of its comments and recommendations to achieve greater EE savings in 2022 and 2023 in support of the July 30, 2021 Governor's Proclamation, and SCE looks forward to working with the Commission and other parties to implement these necessary emergency measures to help ensure the safety and reliability of the California energy grid.

Respectfully submitted,

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